

# United States Patent and Trademark Office



APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	ATTORNEY DOCKET NO. CONFIRMATION NO.	
09/970,399	10/03/2001	Miroslav Svajda	47161-00016 9667		
30223	7590 02/26/2004		EXAMINER		
JENKENS & GILCHRIST, P.C. 225 WEST WASHINGTON SUITE 2600			NI, SUHAN		
			ART UNIT	PAPER NUMBER	
CHICAGO, I	IL 60606		2643		
			DATE MAILED: 02/26/2004	8	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Amplication	) ) )	Applicant(s)	_			
Office Action Summary		Application	on No.	Applicant(s)				
		09/970,39	)9	SVAJDA ET AL.				
		Examiner		Art Unit				
		Suhan Ni		2643				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNIC Insions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this communic period for reply specified above is less than thirty (30) operiod for reply is specified above, the maximum stature to reply within the set or extended period for reply with reply received by the Office later than three months after the patent term adjustment. See 37 CFR 1.704(b).	ATION. 37 CFR 1.136(a). In no evinication. days, a reply within the statitory period will apply and will. by statute, cause the app	ent, however, may a reply be tin utory minimum of thirty (30) day ill expire SIX (6) MONTHS from lication to become ABANDONE	nely filed  s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status								
1)⊠	Responsive to communication(s) filed	on 03 November 2	<u>003</u> .					
, —	This action is <b>FINAL</b> . 2b) This action is non-final.							
3)								
,	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposit	ion of Claims							
5)□ 6)⊠ 7)□	Claim(s) 1-48 is/are pending in the application.  4a) Of the above claim(s) 28-43 is/are withdrawn from consideration.  Claim(s) is/are allowed.  Claim(s) 1-27 and 44-48 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or election requirement.							
Applicat	ion Papers							
10)	The specification is objected to by the The drawing(s) filed on is/are: Applicant may not request that any objection Replacement drawing sheet(s) including the oath or declaration is objected to be	a) accepted or b) ion to the drawing(s) the correction is require	oe held in abeyance. Se red if the drawing(s) is ob	e 37 CFR 1.85(a). ijected to. See 37 CFR 1.121(d).				
Priority (	under 35 U.S.C. § 119							
a)	Acknowledgment is made of a claim for All b) Some * c) None of:  1. Certified copies of the priority downstrain and Copies of the certified copies of application from the International See the attached detailed Office action	ocuments have bee ocuments have bee f the priority docume al Bureau (PCT Rul	en received. en received in Applicat ents have been receiv le 17.2(a)).	ion No ed in this National Stage				
2) Notice 3) Information	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PT mation Disclosure Statement(s) (PTO-1449 or P er No(s)/Mail Date		4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal B 6) Other:					

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#### **DETAILED ACTION**

- 1. This communication is responsive to the amendment filed 11/03/2003.
- 2. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
- 3. A complete reply to a future final office action must include **cancellation of non-elected claims** or other appropriate action (37 CFR 1.144). See MPEP § 821.01.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-27 and 44-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mead et al. (U. S. Pat. 6,044,162) in view of Groppe (U. S. Pat. 5,086,464).

Regarding claims 1, 15, 17 and 48, Mead et al. disclose a hearing device, comprising: an input transducer (128) for generating an electrical output signal; a first amplifier (130) for receiving the electrical output signal of the transducer and for generating an amplified signal; and a first filter (116-1) for receiving the amplified signal of the amplifier and for generating an filtered signal. But Mead et al. do not specially teach a telecoil type input transducer as claimed.

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Groppe discloses a similar hearing device, comprising a telecoil type input transducer for inductively pickup input signal. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to be motivated to provide the inductive pickup transducer taught by Groppe for the hearing device as an alternate choice, for providing a wireless communication for the user.

Moreover, Mead et al. do not clearly teach an IC as claimed. Since providing IC technology for a hearing device is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to be motivated to provide a IC including all necessary elements for the hearing device, in order to provide a more integrated and size reduced hearing device, also with less power consumption.

Furthermore, Mead et al. do not clearly teach the frequency response rang for the filter as claimed. Since selecting a filter with desirable characteristics, such as frequency response for specific application is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to be motivated to provide a filter with desirable pass band for the processing IC of the hearing device, in order to provide desirable acoustic effect for different hearing applications.

Regarding claims 2-3, Mead et al. further disclose the hearing device, wherein the device includes a second amplifier (118-1) for receiving the first filtered signal and for generating a second amplified signal as claimed.

Regarding claim 4, Mead et al. further disclose the hearing device, wherein the device includes a second filter (116-2) for receiving the first amplified signal and for generating a second filtered signal as claimed.

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Regarding claims 5-6, Mead et al. further disclose the hearing device, wherein the device includes a third amplifier (118-2) for receiving the second filtered signal and for generating an third amplified signal as claimed.

Regarding claims 7, 16 and 26-27, neither Mead et al. nor Groppe specially teach the details of the telecoil type input transducer as claimed. Since providing a center-tapped telecoil as claimed for a hearing device is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to be motivated to provide the center-tapped telecoil with two signal output terminals for the hearing device, in order to provide users a wireless communication hearing device with desirable acoustic characteristics.

Method claims 8-14 are similar to claims 1-7 except for being couched in method terminology, such methods would be inherent when the structure is shown in the cited references.

Regarding claims 18-20, Mead et al. further disclose the hearing device, wherein the device includes a third filter (116-3) for receiving the first amplified signal and for generating a third filtered signal as claimed.

Regarding claims 21-22, neither Mead et al. nor Groppe specially teach a protection circuitry for the processing IC of the hearing device as claimed. Since providing a protective element for a processing circuit for a hearing device is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to be motivated to provide the protective element for the processing IC of the hearing device, in order to provide the hearing device with protective features, and make the hearing device more durable.

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Regarding claims 23-24, Mead et al. further disclose the hearing device, wherein the device includes an A/D (132) and a D/A (124) converter for DSP.

Regarding claim 25, Mead et al. further disclose the hearing device, wherein the device includes a plurality of controllers (44) for controlling an incoming signal as claimed.

Method claims 44-47 are similar to claims 15-27 except for being couched in method terminology, such methods would be inherent when the structure is shown in the cited references.

### Response to Amendment

5. Applicant's arguments dated 11/03/2003 have been fully considered, but they are not deemed to be persuasive.

Regarding claims 1, 15, 17 and 48, in the cited prior art, Mead et al. disclose a hearing device, comprising: an input transducer for generating an electrical output signal; a first amplifier for receiving the electrical output signal of the transducer and for generating an amplified signal; and a first filter for receiving the amplified signal of the amplifier and for generating an filtered signal. But Mead et al. do not specially teach a telecoil type input transducer as claimed. Groppe discloses a similar hearing device, comprising a telecoil type input transducer for inductively pickup input signal. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to be motivated to provide the inductive pickup transducer taught by Groppe for the hearing device as an alternate choice, for providing a wireless communication for the user. Furthermore, Mead et al. do not clearly teach an IC as claimed. Since providing IC technology for a hearing device is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to be motivated to provide a

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IC including all necessary elements for the hearing device, in order to provide a more integrated and size reduced hearing device, also with less power consumption. Moreover, Mead et al. do not clearly teach the frequency response rang for the filter as claimed. Since selecting a filter with desirable characteristics, such as frequency response for specific application is very well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to be motivated to provide a filter with desirable pass band for the processing IC of the hearing device, in order to provide desirable acoustic effect for different hearing applications.

Regarding claims 1, 15, 17 and 48, the applicants argue no motivation to combine the references. It is not necessary that the references actually suggest, expressly or in so many words the changes or improvements that applicants have made. The test for combining references is what the references as whole would have suggested to one of ordinary skilled in the art. In re Sheckler, 168 USPQ 716 (CCPA 1971); In re Mlaughlin 170 USPQ 209 (CCPA 1971); In re Young 159 USPQ 715 (CCPA 1968).

As to the combination of Mead et al. and Groppe has failed to teach applicants' claimed invention, but the Examiner respectfully disagrees with the applicants, since the combination of these references clearly teaches the recited claim limitations.

Method claims 8-14 and 44-47 are similar to claims 1-7, 15-27 and 48 except for being couched in method terminology; such methods would be inherent when the structure is shown in the references.

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#### Conclusion

6. THIS ACTION IS MADE FINAL. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

7. Any response to this final action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

Or faxed to:

(703) 308-9051, (for formal communications; please mark "EXPEDITED PROCEDURE"), or

(703) 305-9508, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to:

Receptionist, Sixth Floor, Crystal Park II, 2121 Crystal Drive, Arlington, Virginia 22202

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Suhan Ni** whose telephone number is (703)-308-9322, and the number for fax machine is (703)-305-9508. The examiner can normally be reached on Monday

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through Thursday from 9:00 am to 7:30 pm. If it is necessary, the examiner's supervisor, Curtis Kuntz, can be reached at (703) 305-4708.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 305-3900.

Suhan Ni Patent Examiner Art Unit 2643 USPTO

SUHAN NI PATENT EXAMINER

February 19, 2004